

DOCUMENT RESUME

ED 480 740

EA 032 733

TITLE Development of Indicators for Educational Planning: Brazil, Cambodia, Estonia, Gambia, Lithuania, Thailand.

INSTITUTION United Nations Educational, Scientific, and Cultural Organization, Paris (France). International Inst. for Educational Planning.

PUB DATE 2001-00-00

NOTE 62p.

AVAILABLE FROM United Nations Educational, Scientific, and Cultural Organization, International Inst. for Educational Planning, 7-9 rue Eugene-Delacroix, 75116 Paris, France. E-mail: information@iiep.unesco.org; Web site: <http://www.unesco.org/iiep>.

PUB TYPE Collected Works - General (020) -- Numerical/Quantitative Data (110) -- Reports - Research (143)

EDRS PRICE EDRS Price MF01 Plus Postage. PC Not Available from EDRS

DESCRIPTORS Access to Education; Compulsory Education; Data Analysis; Data Collection; Educational Assessment; *Educational Indicators; Educational Opportunities; *Educational Planning; Educational Quality; Educational Strategies; Elementary Secondary Education; Foreign Countries; *Information Dissemination; Public Education

IDENTIFIERS Brazil; Cambodia; Estonia; Gambia; Lithuania; Thailand

ABSTRACT

This publication presents the outcomes of a distance education course on development and dissemination of indicators used for educational planning. The course took place from November 2000 to February 2001 and was attended by representatives from the ministries of education of Brazil, Cambodia, Estonia, Gambia, Lithuania, and Thailand. The overall objective of the course was to strengthen national capacities and, in particular, to provide planners and managers with the skills necessary to improve the use of databases and to develop indicators on the functioning of the education system. This publication presents the practical work carried out by the course participants. While the individual documents contained in this publication are different for each country, all were prepared with two general objectives in mind: (1) to increase the access rate to compulsory education, and (2) to improve the quality of compulsory education. Each country's document and collection of statistics is unique to its situation and illustrates the different possibilities for presenting the same indicator. The document preparers chose different types of figures to represent, for example, the evolution of the gross enrollment rate or disparities between the sexes. The data are presented through graphs, charts, and tables. (WFA)

ED 480 740

**Development of Indicators for Educational
Planning: Brazil, Cambodia, Estonia, Gambia,
Lithuania, Thailand.**

2001

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

6. This document has been reproduced as received
from the person or organization originating it.

Minor changes have been made to improve
reproduction quality.

Points of view or opinions stated in this
document do not necessarily represent official
OEI position or policy.

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL IN MICROFICHE,
AND IN ELECTRONIC MEDIA FOR ERIC
COLLECTION SUBSCRIBERS ONLY,
HAS BEEN GRANTED BY

J Hall

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

2A

2

BEST COPY AVAILABLE

EA 032 733



DEVELOPMENT OF INDICATORS FOR EDUCATIONAL PLANNING

Brazil • Cambodia • Estonia •
Gambia • Lithuania • Thailand



International Institute
for Educational Planning

EAD32733

DEVELOPMENT OF INDICATORS FOR EDUCATIONAL PLANNING

Brazil • Cambodia • Estonia •
Gambia • Lithuania • Thailand

The views and opinions expressed in this booklet are those of the authors and do not necessarily represent the views of UNESCO or of the IIEP. The designations employed and the presentation of material throughout this review do not imply the expression of any opinion whatsoever on the part of UNESCO or IIEP concerning the legal status of any country, territory, city or area or its authorities, or concerning its frontiers or boundaries.

The publication costs of its study have been covered through a grant-in-aid offered by UNESCO and by voluntary contributions made by several Member States of UNESCO, the list of which will be found at the end of the volume.

Published by:
International Institute for Educational Planning
7-9 rue Eugène-Delacroix, 75116 Paris
e-mail: information@iiep.unesco.org
IIEP web site: <http://www.unesco.org/iiep>.

Cover design: Nathalie Pruneau
Typesetting: Linéale Production
Printed in IIEP's printshop

Content

Introduction	5
Brazil	9
Cambodia	15
Estonia	27
Gambia	37
Lithuania	45
Thailand	51

Introduction

Countries in general have a large amount of data on their education systems at their disposal. Statistical departments have been set up in almost all ministries of education, and school censuses are carried out practically everywhere. Even if the quality of these data is far from perfect, their importance for decision-making is obvious. Nevertheless, one can notice, in most countries, that decision-makers scarcely integrate these data into the process of defining educational policies. One part of the problem is that the choice of data available in statistical documents often lacks relevance: it does not allow for proper monitoring and control of the functioning of the system, nor does it adequately respond to the needs of decision-makers. Data processing and making data available is most of the time a long and tedious process, resulting in the production of information which is often obsolete. If countries manage to more or less overcome the above difficulties a final problem crops up: the statistical reports are too cumbersome, containing too many data and information. Decision-makers need a document, which is easier to read and to interpret, hence more analytical and more relevant.

Documents of this kind have been prepared in certain countries both developed and developing, and, with the support of the International Institute for Educational Planning, in Lesotho and Mali. In general these different documents outline the state of the education system, as well as its evolution, in approximately thirty indicators. Each indicator is presented in

the form of tables and figures, and is accompanied by a brief analysis. The indicators are chosen in function of the country's educational policy. Therefore, they provide decision-makers with an essential instrument for evaluating and guiding their actions with respect to education.

Computer tools facilitate significantly the preparation of this type of document. Computers are spreading rapidly in planning departments, at central level and sometimes at regional. But educational planners have expressed a serious need for training, which would result in a more effective use of computers to the advantage of their work. It is therefore necessary to meet this growing demand to ensure efficient production of information, and in so doing bridge the gap between the production and utilization of information at different levels of administration.

In an attempt to address this problem the IIEP has prepared a methodological guide on the development and dissemination of indicators. This document is based, *inter alia*, on the experiences of Lesotho and Mali. In addition, the IIEP has launched a series of intensive sub-regional training courses with the aim of disseminating the concepts, methods and techniques necessary for the development of an indicators system. French-speaking West-African, Eastern and Southern African, South Asian and Portuguese-speaking African countries have participated to such courses.

The first distance education course of this topic was organized from November 2000

to February 2001, in which six countries from three different continents participated (Brazil, Cambodia, Estonia, Gambia, Lithuania and Thailand).

The overall objective of the courses was to strengthen national capacities and, in particular, to provide planners and managers with the skills necessary to improve the use of databases and to develop indicators on the functioning of the education system. More specifically, the objectives were to improve the knowledge and the technical skills of the participants regarding:

- the strengths and weaknesses of some components of the information systems in their respective countries;
- the information needs and the appropriate use of the necessary data banks;
- the development and analysis of indicators (the development of an indicators system);
- the communication techniques to facilitate information transmission;
- the use of indicators for planning and monitoring purposes.

The following areas were covered during the courses:

Part I:

The role of indicators in educational planning

Part II:

Analysis and communication of information

The first part examined the extent to which weaknesses in information systems can call into question the validity of certain indicators. The process of establishing indicators was then analyzed and discussed, on the basis of reports prepared

by the participants, and of studies carried out by IIEP on indicator systems. Each national team was asked to outline the objectives of their national education policy and to identify indicators pertaining to those objectives. More precisely, the topics covered by this first part were:

- the role of indicators in the educational management;
- the information needs, and the availability of data;
- the selection of indicators;
- interpretation of results.

Once the above-mentioned tasks have been completed, the important challenge of analyzing the information remain. The analysis must be explicit, brief but of broad scope, and useful to the decision-makers. This second part of the course entailed an in-depth analysis of the various indicators to be presented in a document, and of how to analyze the results in an explicit, comprehensive and useful way for decision-makers. More specifically, the following issues were examined:

- the process of analyzing indicators;
- the presentation of the results in a document.

The organization of the courses involved various pedagogical methods. The face-to-face course was based on practical exercises, group discussions, as well as hands-on practice on computers. The distance course was conducted by using the appropriate materials, and other publications via regular correspondence, in addition to exchanges of experiences and concrete exercises through emails.

The course achieved two major results. Firstly, the participants were made aware of

the use of an indicators report, and of its feasibility, even within the context of budgetary constraints. They also acquired the skills necessary to complete such a document in a relatively short period of time. Secondly, every national team identified and analyzed a few essential indicators on its education system, in order to demonstrate what could be done with existing data. This analysis should appear in an attractive format presenting both tables and figures, as well as written comments on each indicator.

In the wake of these courses, several countries have moreover begun to set up an education indicators system. Senegal, for instance, managed to publish each year an indicators report on basic education, as well as Lesotho. Mali has finalized a second report (the first one was prepared with the assistance of the IIEP in 1993). Mozambique not only publishes a national report, but it is also involved in working at the development of regional indicators report.

This publication presents the practical work carried out by the participants at the distance education course completed in February 2001. A similar type of documents have already been published on the work realized by the participants at the face-to-face course for French-speaking Western Africa, English-speaking Eastern and Southern Africa and Portuguese-speaking Africa countries. The IIEP felt that it would be both interesting and useful to publish this work for three reasons. First and foremost, in presenting the results of this course (about 70-hours training), this publication demonstrates that the completion of an indicators' report is a task that can be accomplished in a reasonable

lapse of time. However, this does not imply that it is a simple exercise, but rather that technical difficulties should not be seen as an obstacle in this endeavor. A 3 months-distance education course, expecting 5 hours per week (or an intensive training course of two weeks duration) can, in fact, provide planners with the basic technical skills necessary for such an achievement.

Furthermore, the documents prepared by the national teams illustrate, as in a catalogue, the different possibilities for presenting the same indicator. The teams chose different types of figures to represent, for example, the evolution of the gross enrolment rate, or regional disparities or disparities between the sexes. The commentaries do not always follow the same outline and do not always place the emphasis on the same elements. Indeed, a specialist with a similar task would get a source of inspiration from this document by taking a close look at each teams' approach, even if sometimes the accounts are not perfect.

The choice of figures is open to discussion in certain cases, and the text containing the analysis could, here and there, be improved upon. The Institute felt that it would be preferable, nevertheless, to publish the work as it is, the main aim being simply to present the results of this course as an illustration of what can be done, within a specific time frame, with available data.

Finally, although this is not the primary objective, the document contains statistics on the current situation of the education system in six countries through the world. For the most part, this information is based on the most recent statistical data available from educational planning offices. They

provide a fairly detailed picture of some issues in the development of education in these countries. The IIEP hopes that the publication will reinforce the idea that the setting up of an indicators system on the

development of education is both useful and feasible, and that its dissemination will encourage the responsible government officials to support the implementation of such systems within their ministries.

A few indicators
on the secondary level

BRAZIL

Document prepared by:

Ulysses N. LEAL COSTA
Marcio A. MONTEIRO
Frank NEY S. LIMA
Irene NUNES DE SOUZA

INEP/Ministry of Education

Introduction

One of the main targets of public interventions in Brazil is noted in the Educational System. In the last recent years the country has observed an increasing number in pupils that are now reaching the final stages of the eight-year fundamental scholarship. Despite the irregular distribution of enrolment taxes in the country, Brazil has realized continuous growing rates of students that are finishing the fundamental level (12% to 15% per year). This leads to a new challenge: to increase a suitable volume of seats at the secondary level.

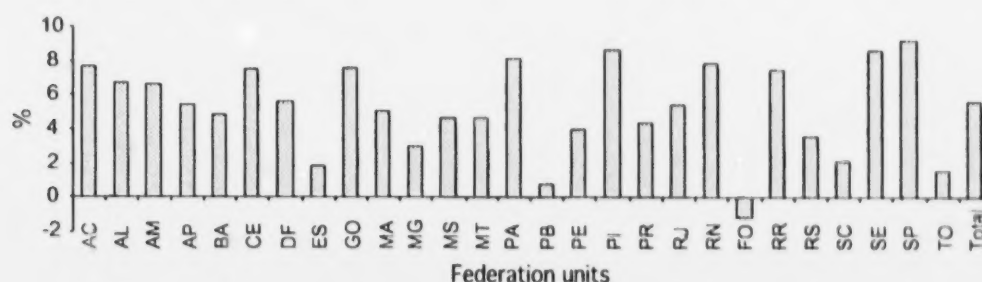
Since the offer of more and better secondary level is now an important objective, we have chosen some indicators we believe are necessary to give a general figure of this level for further discussion.

Some changes have been made since the previous version of this paper was presented to the IIEP for comments and suggestions. We believe the changes we have introduced make the document easily readable for decision-makers. As we had written in the previous version of the document, we do not intend to be exhaustive. For decision making, synthetic information is one of the virtues a report must have.

Brazilian Team

Table 1. General objective: To increase the number of secondary level schools
Indicator: Number of secondary level schools

Federation unit	Schools secondary 1999	Index 1998/1999 (%)
AC	42	7.7
AL	238	6.7
AM	210	6.6
AP	58	5.5
BA	1,102	4.9
CE	659	7.5
DF	149	5.7
ES	330	1.9
GO	768	7.6
MA	434	5.1
MG	2,000	3.0
MS	377	4.7
MT	381	4.7
PA	449	8.2
PB	392	0.8
PE	929	4.0
PI	290	8.6
PR	1,154	4.4
RJ	1,638	5.5
RN	330	7.8
RO	177	-1.1
RR	43	7.5
RS	1,023	3.6
SC	797	2.2
SE	176	8.6
SP	4,202	9.2
TO	255	1.6
Total	18,603	5.6

Graph 1. Annual growth rate of the number of secondary level schools, 1998-1999 (%)

As we can see by the depicted graph and table the number of schools at secondary level has grown constantly year after year. This growth, however, has not been at an equal rate when we make comparisons between states. The dispersion is too high. Notably, the rate was significantly high for a first analysed period (1996-1997) and then there was a reduction for the two other periods (1997-1998 and 1998-1999).

Due to the different levels of development within the states and the facts that the secondary level is under each state's responsibility, the standard deviation for this index is high. While São Paulo has a index of 9,2% when we compare 1998 to 1999, Rondônia shows -1,1% in the growth rate. Maybe a national politic in order to equalize opportunities in school access through an increase in the number of schools should be undertaken.

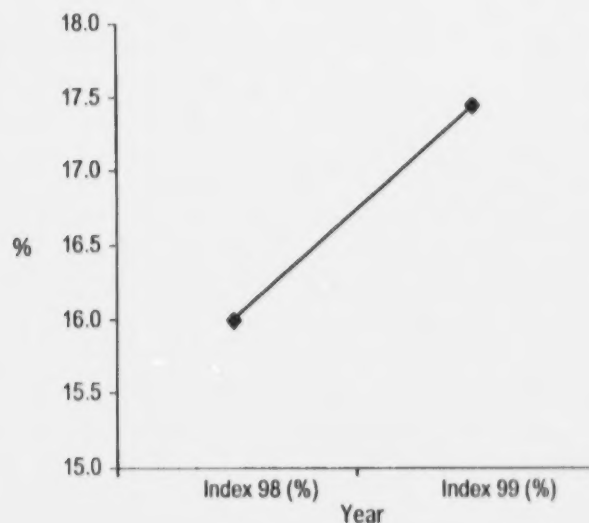
Table 2. General objective: To increase the vacancy at the secondary level
Indicator: Number of enrolment at secondary level/Number of enrolment
in basic educational system

Federation unit	Index 1998 (%)	Index 1999 (%)
AC	12.5	13.5
AL	8.7	9.8
AM	12.2	13.6
AP	18.1	18.2
BA	10.5	11.7
CE	10.3	11.8
DF	21.4	23.5
ES	19.5	20.8
GO	15.5	16.8
MA	9.0	10.0
MG	15.9	19.3
MS	15.5	16.2
MT	13.4	13.2
PA	10.4	12.4
PB	9.5	9.7
PE	13.6	14.8
PI	8.9	9.5
PR	20.4	23.0
RJ	18.7	20.1
RN	13.7	15.1

Table 2. (continued)

Federation Unit	Index 1998 (%)	Index 1999 (%)
RO	11.5	12.4
RR	19.1	19.6
RS	19.6	20.5
SC	18.4	19.3
SE	11.0	12.3
SP	23.1	24.5
TO	14.1	14.8
Total	16.0	17.4

Graph 2. Number of enrolment at secondary level/number of enrolment in basic education system



Enrolment at secondary level is growing year after year not only in absolute numbers, but also when compared to the growth at the basic level. We believe that such trend has much to do with the fact that many people are now reaching the last year of the

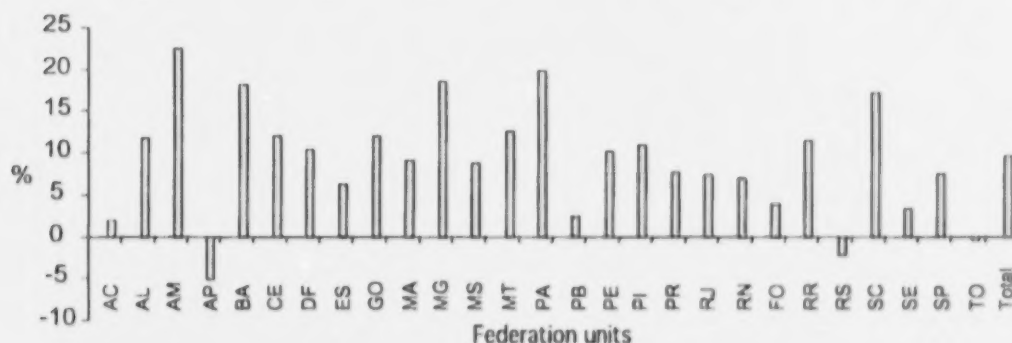
fundamental scholarship, aiming to the secondary level.

Once again the growing rate varies widely from state to state. While São Paulo presented maximum of 24.5%, Piauí shows a rate of 9.5%.

Table 3. General objective: To increase the vacancy at the secondary level
Indicator: Annual growth rate of teachers at the secondary level

Federation unit	Teachers secondary 1999	Index 1998-1999 (%)
AC	1,020	1.9
AL	4,111	11.9
AM	4,453	22.5
AP	1,189	-5.1
BA	22,042	18.1
CE	11,451	12.0
DF	6,603	10.4
ES	7,605	6.3
GO	13,337	11.9
MA	9,535	9.1
MG	45,264	18.6
MS	5,465	8.8
MT	5,685	12.6
PA	9,467	19.7
PB	6,571	2.4
PE	16,462	10.2
PI	5,106	10.9
PR	28,101	7.6
RJ	40,250	7.3
RN	5,333	6.9
RO	2,167	3.9
RR	674	11.4
RS	24,100	-2.2
SC	15,163	17.3
SE	2,948	3.3
SP	104,313	7.5
TO	2,742	-0.4
Total	401,157	9.6

Graph 3. Annual growth rate of the number of teachers for the secondary level, 1998-1999



This indicator shows an irregular growth when we compare year after year. The same instability is also seen when we observe the behaviour of the data in the above depicted

table by states. We think that such irregularities demand public intervention in order to maintain a good level of teachers for the system and diminish the fluctuation.

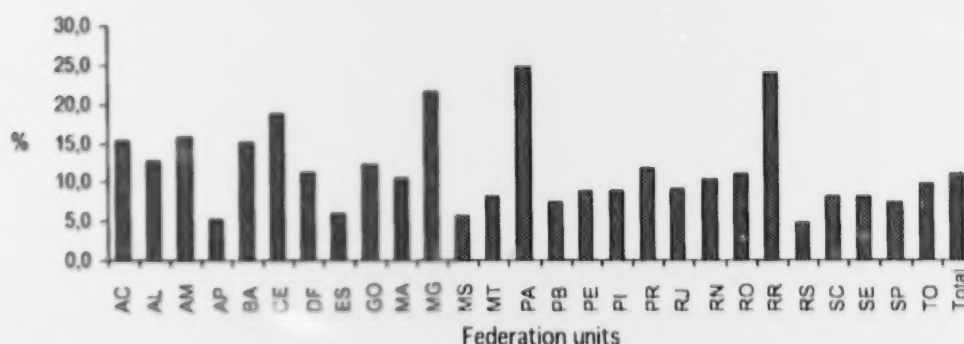
Table 4. General objective: To increase the vacancy at the secondary level
Indicator: Annual growth rate of classes at the secondary level

Federation unit	Classes secondary 1999	Index 1998-1999 (%)
AC	619	15.3
AL	1,884	12.7
AM	2,599	15.8
AP	729	5.3
BA	12,679	15.2
CE	6,152	18.8
DF	3,091	11.3
ES	4,235	6.0
GO	6,153	12.3
MA	4,600	10.5
MG	23,652	21.7
MS	2,626	5.8
MT	2,746	8.2
PA	5,541	24.6
PB	2,643	7.5
PE	7,664	8.9
PI	2,074	8.8
PR	13,698	11.7
RJ	17,007	9.2
RN	2,977	10.4
RO	1,276	11.0
RR	564	24.0
RS	12,549	4.8
SC	6,932	8.0
SE	1,469	8.3
SP	52,824	7.4
TO	1,698	9.8
Total	200,681	11.1

Coming along with the other indicators, the number of classes in the secondary level is growing in all states when we observe period 1998-1999. Once again, however, the growing rate varies widely when we compare

state to state. While Para, Roraima and Minas Gerais show the maximum values for this indicator (24.6%, 24% and 21.7% respectively, Rio Grande do Sul, and Mato Grosso do Sul show rates of 4.8%, 5.3% and 5.8%.

Graph 4. Annual growth rate of the number of classes for the secondary level, 1998-1999 (%)



A few indicators
on Basic education

CAMBODIA

Document prepared by:

Phala KUY
Pao MAO
Pitin PONG
Sopheap SAR

Ministry of Education, Youth and sports

Introduction

A General Education System

- The objective of the Cambodian education system is to fully develop children in all aspects of qualities, mentally and physically. In order to achieve this objective, schools need to accomplish many tasks. They are obliged to develop in the students the spirit of self-confidence, self-reliance, responsibility, solidarity, national unity and patriotism. Schools must also instill in their students positive attitudes of paying respect to the law and human rights.
- Other responsibilities of schools are to nurture children to become good citizens, to live together peacefully, to be able to strengthen their responsibilities towards their families' happiness and to make a contribution to promoting social welfare.
- General education strives to meet the above-mentioned objective by delivering knowledge and skills, promoting the personal qualities of the students, and accumulating work experiences and various activities, which are beneficial to students, their schoolmates and to society as a whole.
- In consideration of their increasing age, the objective of primary education is to focus on the development of children's personalities by helping to upgrade their mental and psychological abilities. By doing so, children will be come capable of translating their basic knowledge (reading, writing, speaking, listening and arithmetic) to solving their immediate problems, and to cherishing a love of learning and doing labor. Through these efforts, they will become useful members of the community and be capable of acquiring simple skills or continuing their study to higher grades.
- The prime objective of secondary education is to enhance the knowledge that the students have already acquired at the primary education level. This aims to ensure the development of their freedom of thought and expression, to build their attitude of tolerance, and, at the same time, to develop their talents, individual qualities, creativity, social ethics and skills in order to create a harmonious society.
- In short, after receiving basic education students will have grown to full adulthood and be capable of living in society and continuing their study to higher grades as required.

B Policies on education development

Ministry of Education, Youth and Sport defines four major policies as follows:

1. Making nine years of basic general education available throughout the country, and developing new opportunities for functional literacy.
2. Modernizing and improving the quality of the educational system through effective reforms.
3. Linking education and training development with the socioeconomic requirements and the labor market.

4. Rehabilitating and developing the youth and sport sub-sectors in both formal and non-formal education systems.

To adopt the above-mentioned policy, the Ministry is paying due attention to the following priority policy objectives:

- To create equal opportunities for school-age children of all regions and all ethnic groups to attend schools so that they have the chance to complete primary education and receive the full nine years of basic education. In this sense, MoEYS will encourage all schools to have a complete range of grades (Grade 1 to Grade 6) for primary education level and encourage schools in the areas where the school-age population is sparse to apply multi-grade teaching methods. At present, about 50% of schools do not have a complete range of grades in the primary cycle.
- To increase the internal efficiency of the education system. This is done by implementing measures such as retraining teachers; increasing the number of learning hours; providing adequate textbooks and teacher's guides; applying modern teaching methodology; forming inspector teams; reforming methods to evaluate students' achievements; and motivating members of the local community to be more active in educational development.
- To restore the physical infrastructure and build new schools. MoEYS will also continue to construct at least one lower-secondary school attached to the core school of each school cluster.
- To develop other important sub-sectors. In parallel with these efforts, MoEYS will also develop other important sub-sectors. There are upper-secondary education, higher education, technical education and vocational training in order that more young people may have a chance to further their study in higher grades or to acquire technical skills according to their own interests and talents.

1 Access and participation

Primary education is the first level of education in the country's education system. Schools were reopened in early 1979 after the collapse of the Khmer Rouge regime. Through the strong joint efforts of the community, local authorities and the MoEYS, an education system was re-established.

In the 1999-2000 school year, the country has a total of 5,274 primary schools (for 13,408 villages), 874 pre-school, included pre-school attached in primary schools, 363 junior high school (colleges) and 140 Senior high schools (secondary). Of the total number of primary schools, about 47% do not have the complete range of grades (Grades I through VI) for the primary cycle.

Children who live far away from a school with the complete range of grades find very hard to continue learning and some of them inevitably become dropouts.

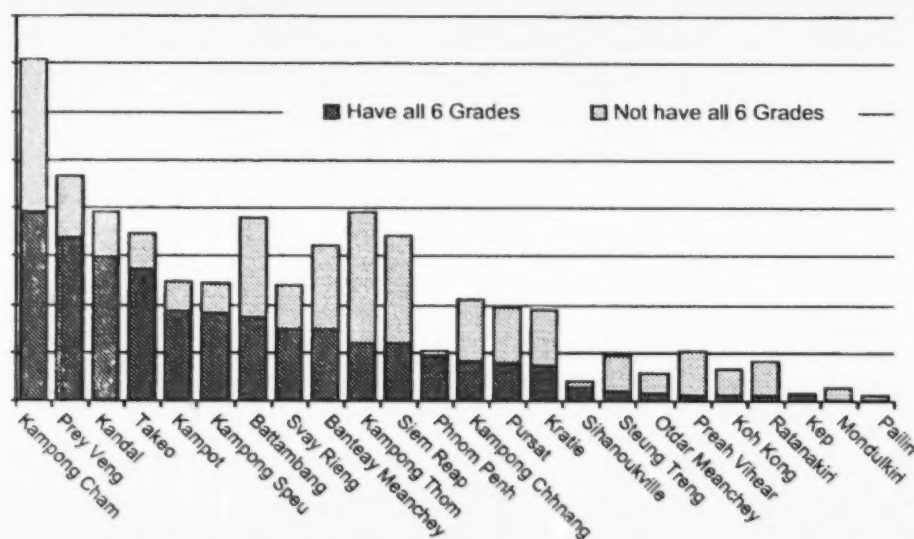
Due to budget constraints there is little hope of ensuring equal opportunity for every child to receive a 9-year basic education in the very near future. Problems are still found in education network, such as poor services of education delivery and a large gap in education quality between urban schools and rural or remote schools.

The secondary school did not cover for all districts; it located in the big district, especially in the town. In the remote provinces or small municipality, it has only one senior high school.

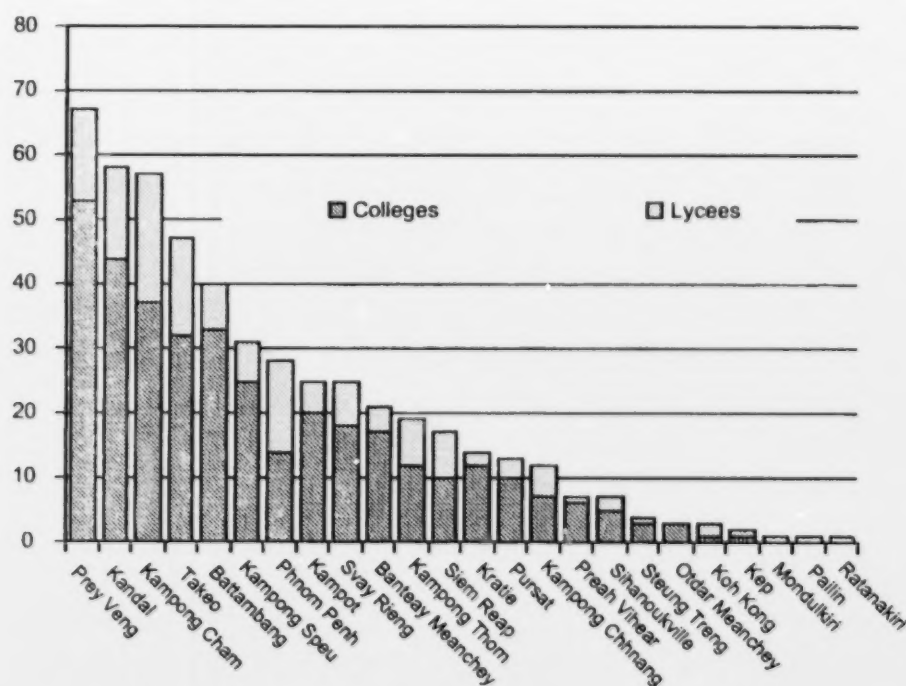
Table 1. Situation of primary and secondary schools in Cambodia, 1999-2000

Primary school	Percentage	Secondary schools	Percentage
Schools with Grade I only:	6.6%	Schools with Grade 7 only:	1.59%
Schools with Grades I and II:	13.1%	Schools with Grade 7-8	1.99%
Schools with Grades I through III:	10.2%	Schools with Grade 7-9	68.59%
Schools with Grades I through IV:	8.8%	Schools with Grade 7-10	1.19%
Schools with grades I through V:	7.7%	Schools with Grade 7-11	2.19%
Schools with a complete range of Grades	53.6%	Schools with Grade 7-12	24.45%
Total primary school: 5,274	100%	Total secondary schools: 503	100%

Graph 1. Number of primary schools by province, 1999-2000



Graph 2. Number of colleges and lycees by province, 1999-2000



Enrolment rates

The net enrolment rate in primary education for the whole country is 85.5%. In other words, about 14.4% of the population aged between 6-11 remains outside the school. The increasing number of dropouts in lower grades is the cause of the higher rate of illiteracy. The situation is worse in remote provinces as the net enrollment rate is even lower than 53%.

Because of poverty, shortage of labor in the family and the low level of education, certain segments of the population perceive that education is not imperative for themselves or their families.

The number of students varies up to the size of the provinces. If looking on the

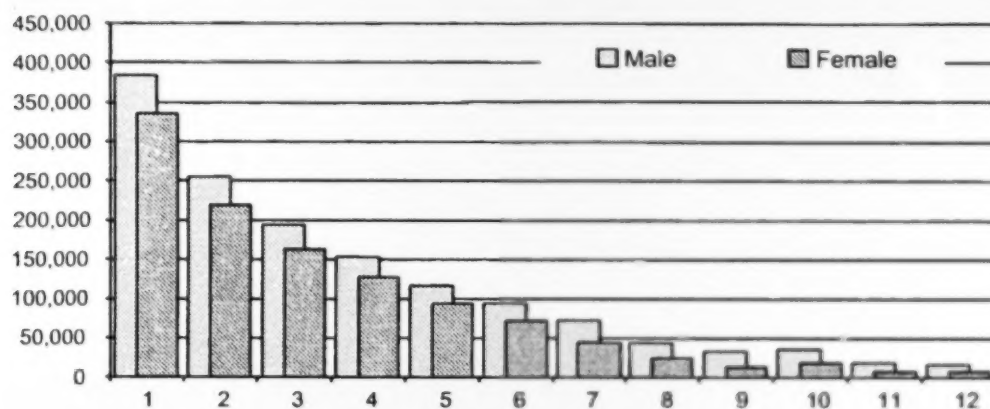
enrolment rate, the urban keeps the first place, the same as the female students. The number of students by grade showed that all citizens couldn't complete 9 years of education as Constitution assumed. The students decreased grade by grade, the repetition and dropout rates are very high.

The indicators on classes per classroom are bigger than 1, for the whole country is 1.3. Because of the shortage of classrooms, 54 per cent of schools learn in 2 shifts. The shortage of classrooms is very critical for schools in the urban areas at 75.3 pupils per classroom, thus forcing some schools to conduct 3 shifts per day.

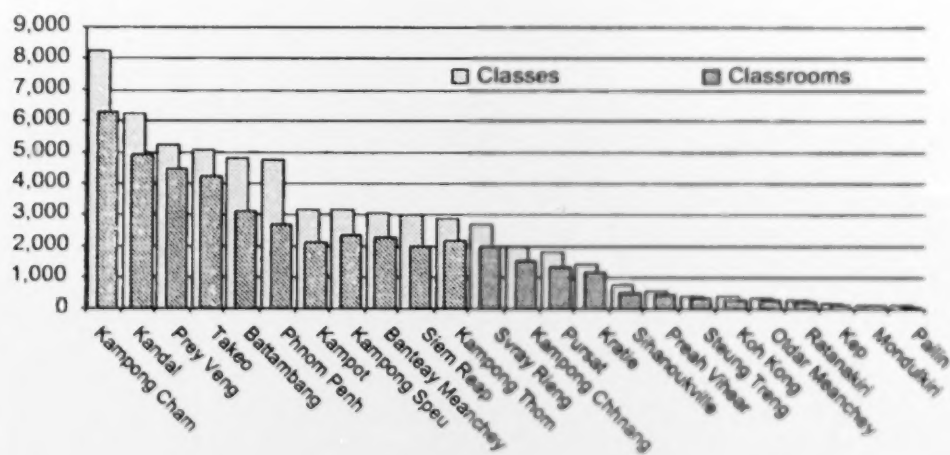
Table 2. Admission and enrolment rates in primary, lower and upper secondary levels

Indicators, 1999-2000	Total	Female
Gross admission rate	123.6%	119.5%
Net admission rate	71.4%	69.7%
Gross enrollment rate in primary	100.3%	93.3%
Net enrollment rate in primary	85.5%	81.7%
Gross enrollment rate in lower secondary	22.9%	16.4%
Net enrollment rate in lower secondary	14.4%	11.6%
Gross enrollment rate in upper secondary	11.6%	7.8%
Net enrollment rate in upper secondary	9.3%	6.8%

Graph 3. Number of students by Grade



Graph 4. Classes and classrooms by province



BEST COPY AVAILABLE

2 Internal efficiency

One objective of the MoEYS is to reduce the repetition rate. In the 1998-1999 school year, as yet, the repetition rate in Grade I is very high at 37.8%, and the promotion rate is only 51.0%. In general, Grade I students have the highest repetition rate.

Dropout rates are too high from Grade I to Grade 3 with about 12%. There is a fear that these dropouts might become illiterates.

The repetition decreases after Grade I until Grade 8 for the benefit exclusively of the promotion, but is important in the last grade 9. The dropout is more or less stable until Grade 6, and then suddenly rises up from grade 7 reaching around 30% in Grade 9.

The pupil-teacher ratio is about 50.6 nation-wide but 44.4 in urban primary schools. The pupils-teacher ratio shows that the problem of shortage of teachers is mainly in primary schools. The recruitment of teachers did not increase the number to meet the needs of the schools.

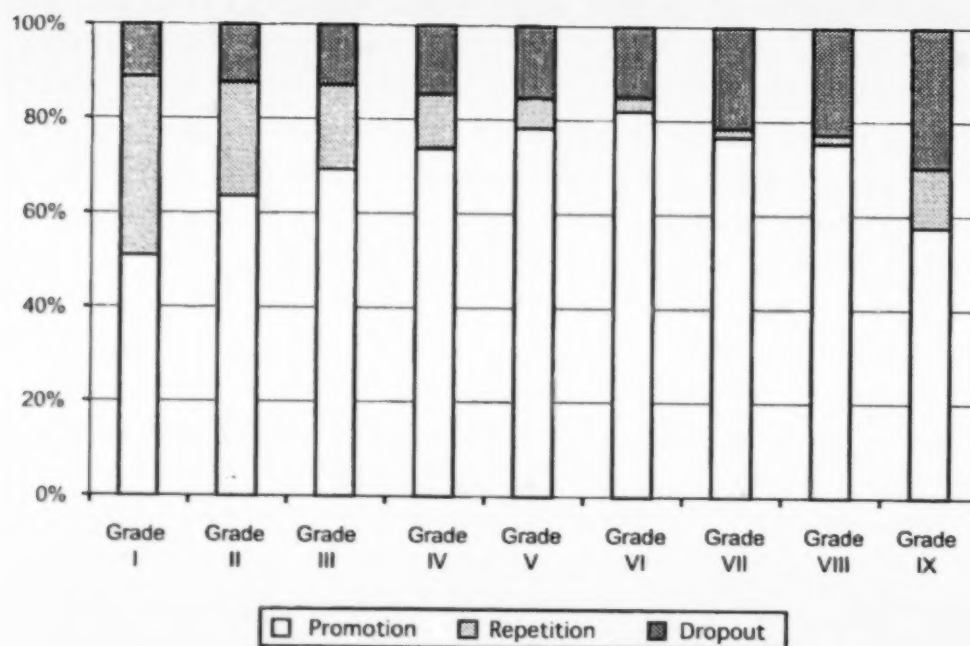
The enrollment rate is relatively low and the learning achievements or internal efficiency of the education system is very low. The low enrollment rate and internal efficiency result in great loss of resources in terms of finance, materials and equipment, and time to the country as a whole. The Ministry of Education, Youth and Sport is striving hard to solve these problems.

Table 3. Internal efficiency of the basic education (1998-1999)

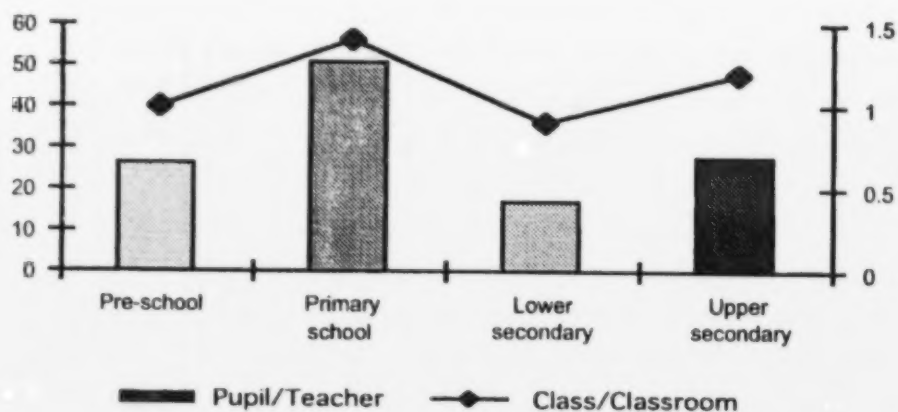
Grade	Promotion	Repetition	Dropout
Grade I	51.0	37.8	11.2
Grade II	63.5	24.2	12.4
Grade III	69.5	17.6	12.9
Grade IV	73.9	11.4	14.7
Grade V	78.1	6.5	15.4
Grade VI	81.8	3.1	15.1
Grade VII	76.4	1.9	21.8
Grade VIII	75.3	1.8	23.0
Grade IX	57.5	12.8	29.7

Source: Education Statistics and Indicators, 2000.

Graph 5. Internal efficiency of basic education (1998-1999)



Graph 6. Pupil/teacher and class/classroom ratios



3 Curriculum reform and expansion of the system

Political and socioeconomic changes have led to successive reforms of the country's education system. Before 1975, the country adopted a French-based education system that required 13 years of education (6 + 4 + 2 + 1) with 4 or 5 major examinations. After 1979, the Ministry of Education, in consideration of the country's urgent needs, executed a 10-year education system (4 + 3 + 3) and then expanded it to an 11-year education system from 1986 to 1996.

The Ministry has continued to improve the education system. The curriculum was reformed, new textbooks were developed and new teaching skills were provided to teachers to prepare ground for the introduction of a

new 12-year education system (6 + 3 + 3) in the 1996-1997 school year. The new system has increased the number of learning hours for every grade in the cycle of primary education.

In the framework of this new system, one school year lasts 38 learning weeks, with 5 periods of learning per day, and each period of learning lasting 40 minutes. Under the old curriculum, one school year lasted only 32-33 weeks, and pupils attended only 4 hours of learning per day.

In reality, the amount of teaching and learning is lower than stipulated by the Ministry, thus causing high rates of wastage (high repetition and dropout rates).

Table 4. Number of schools and school receiving teachers' guides for 4 main subjects

Grade	Number of schools	Number of schools received	% of school received
1	5,264	3,651	69
2	4,916	3,536	72
3	4,223	3,183	75
4	3,687	2,800	76
5	N/a	N/a	N/a
6	2,823	971	34
7	497	411	83
8	489	403	82
9	478	334	70
10	N/a	N/a	N/a
11	N/a	N/a	N/a
12	N/a	N/a	N/a

Source: Education Statistics and Indicators, 2000.

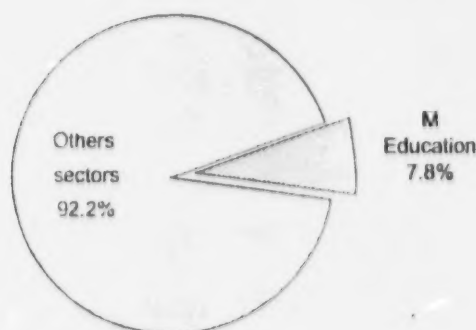
4 Finance and community participation in education

Education surveys have shown that Cambodia is one of the countries in the world in which a very high proportion of the resources for primary education come from the local community. This has perhaps resulted from the fact that the Cambodian people had suffered greatly through a murderous regime, thus boosting their desire to restore their country's education system.

To keep schools functioning well, the community has to, through "Parents' Associations" or "School Supporting Committees", raise money to cover not only the recurrent expenses, but also to sponsor all sport and art activities.

The national budget for education can cover staff salaries (teachers and education administrators) and a small part of recurrent expenditures incurred by central and provincial levels. For the current year 1999, the government has allocated 147 billion riels (almost \$US40 million at current exchange rate) to the education sector, thus representing 10.3% of the national budget or about 1.5% of the GDP. In contrast, in 1997 the education budget was 8.1% of the national budget. Nevertheless, the value of the 1998 budget is far lower than the actual needs of the MoEYS. In 2000, National budget for Education, Youth and Sport was only 7.8%.

Graph 7. Percentage of National budget for education, 2000



BEST COPY AVAILABLE

A few indicators
on Education

ESTONIA

Document prepared by:

Marilin HARRING
Margus KARNER
Silja KIMMEL
Marge KOIVA

Ministry of Education

1 Enrolment rate for basic education institutions in relation to the age group corresponding to basic educational level

In Estonia the age group for compulsory education is between 7-15. The difference which appears for the age group corresponding to compulsory education consists of three parts:

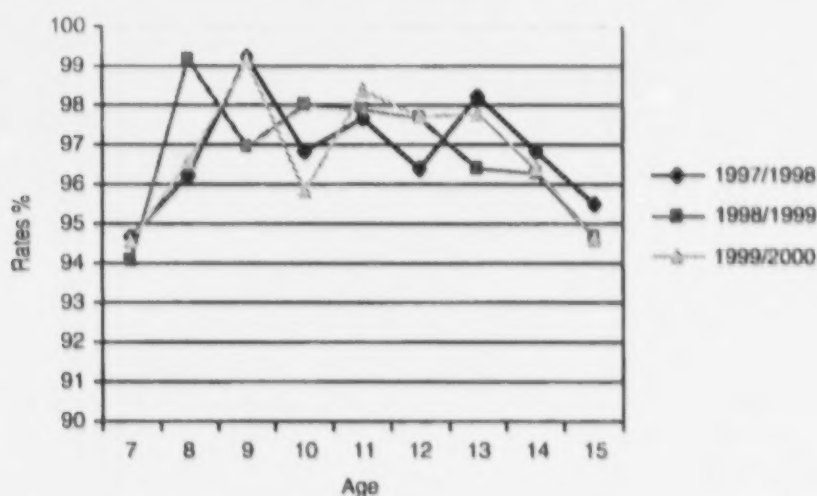
1. Severely handicapped children who do not receive special education;
2. Children with temporary residence permits and educated abroad;
3. Out-of-school children.

Unfortunately, there are no data which would allow to make an accurate estimation of the size of those groups, but we have reason to presume that out-of school children constitute half of the given rate.

Table 1. Age – specific enrolment rates, from 1997-1998 to 1999-2000

Age	Enrolment rate, %		
	1997/1998	1998/1999	1999/2000
7	94.7	94.1	94.6
8	96.2	99.2	96.5
9	99.2	97.0	99.1
10	96.9	98.0	95.9
11	97.7	97.9	98.4
12	96.4	97.6	97.7
13	98.2	96.4	97.8
14	96.9	96.3	96.4
15	95.5	94.7	94.6

Graph 1. Share of 7-15-years old pupils in corresponding population age group



2 Access to secondary education by type

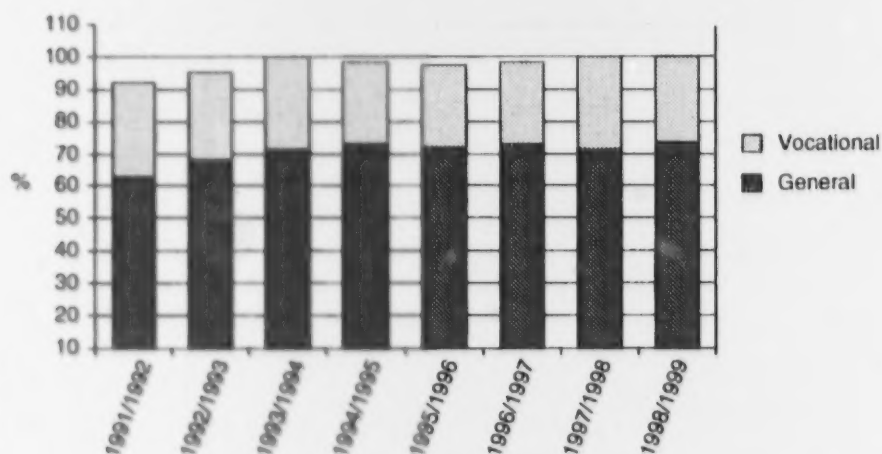
In Estonia choices concerning continuing education made by youth have been changing over the years. Total amount of primary school graduates who are deciding to continue their education at secondary school are increasing rapidly. In 1999 all pupils continued education at secondary school, compared to 92.2% of pupils in 1991.

Because of the very high demand from parents, concerning education, more than 70% of the primary school graduates in 1999 are continuing their studies at general secondary schools (compared to 63% in 1991). Only 26.3% of the pupils entered in 1999 in vocational secondary schools against 29.2% in 1991.

Table 2. Percentage of primary school graduates continuing their studies, by type of secondary education

Year	Percentage continuing in secondary education		
	General	Vocational	Total
1991-1992	63.0	29.2	92.2
1992-1993	68.2	26.8	95.0
1993-1994	71.5	28.5	100.0
1994-1995	72.9	25.3	98.2
1995-1996	72.0	25.3	97.3
1996-1997	72.9	25.2	98.1
1997-1998	71.5	28.3	99.8
1998-1999	73.7	26.3	100.0

Graph 2. Percentage of primary school graduates continuing their studies, by type of secondary education



3 Drop-out by level and gender

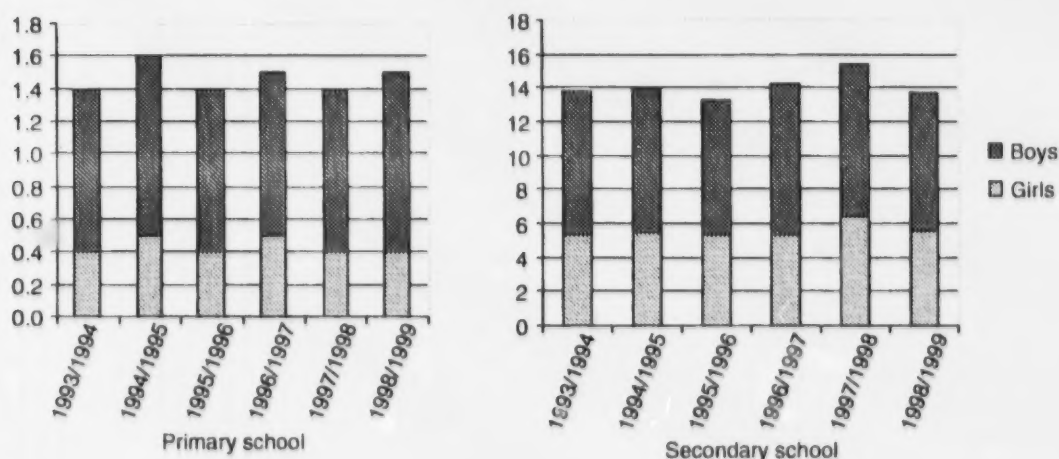
Although there is increasing interest in continuing education so as to achieve a higher education level, there are a lot of pupils who are discontinuing their studies. Though the total percentage of pupils discontinuing their studies at the primary schools is relatively small, about 1.5% over the last 6 years, it is big in absolute numbers.

Taking into account the popularity of secondary general education, the percentage of the pupils discontinuing their studies is surprisingly high, 13.7% in 1999. During the 1993-1999 period, its values varied from a minimum of 13.3% in 1996 to a maximum of 15.4% in 1998.

Table 3. Drop-out rate by school type, from 1993-1994 to 1998-1999

Level	Sex	1993/1994	1994/1995	1995/1996	1996/1997	1997/1998	1998/1999
Primary school	Girls	0.4	0.5	0.4	0.5	0.4	0.4
	Boys	1.0	1.1	1.0	1.0	1.0	1.1
	Total	1.4	1.6	1.4	1.5	1.4	1.5
Secondary school	Girls	5.4	5.5	5.4	5.4	6.4	5.6
	Boys	8.4	8.5	7.9	8.8	9.0	8.1
	Total	13.8	14.0	13.3	14.2	15.4	13.7

Graph 3. Drop-out rate by school type from 1993-1994 to 1998-1999



4 Graduates in relation to the corresponding population age group

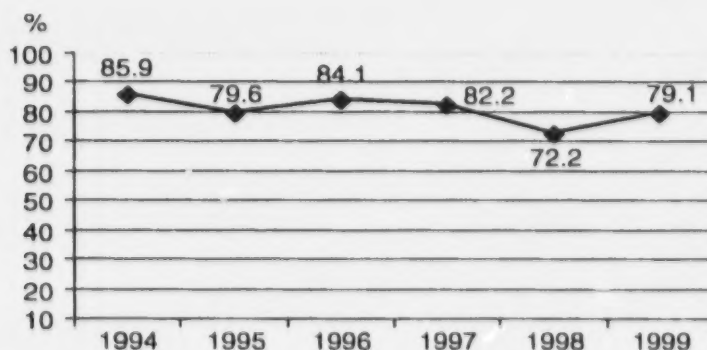
The ratio of basic education graduates to the corresponding age group in 1999 is substantially lower than in 1994. In 1994 the ratio of graduates was 85.9% compared to 79.1% of graduates in 1999. But it is necessary to account, that the number of graduates does not include young residents of Estonia who finished their school abroad. Nevertheless, the stratification of population by educational level is rising: the number of young people who have not obtained basic education despite reaching the corresponding age is growing. At the same time we have more and more young people who are trying to obtain higher education.

During the 1993-1999 period the values indicating the ratio of graduates to the corresponding age group varied from a minimum 72.2 in 1998 to a maximum of 85.9% in 1994. In 1989 the school entrance age was changed from 6 to 7 which means that those who started in 1989, graduated in 1998. That is the main reason why the graduate rate in 1998 is very low (72.2% of the corresponding age group). The transition cohort is studying at present at lower secondary level and therefore corresponding age groups are overlapping.

Table 4. Basic education graduates in relation to the number of 15 year-olds

Year	1994	1995	1996	1997	1998	1999
Population age group (15-year-olds)	21,097	21,113	21,286	21,361	21,794	22,037
Graduated	18,123	16,815	17,893	17,555	15,734	17,427
Ratio of graduates, %	85.9	79.6	84.1	82.2	72.2	79.1

Graph 4. Basic education graduates in relation to the number of 15 year-olds



5 Proportion of teachers by academic qualification background

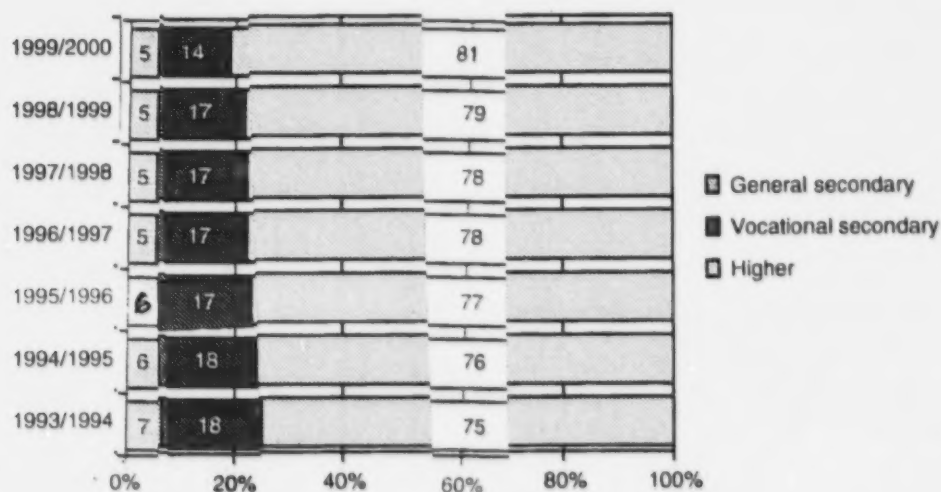
Taking into account the importance of general education, the role of the teachers is very important. In Estonia most of the teachers

have higher education (81% in 2000) and only 5 per cent of teachers have general secondary education.

Table 5. Proportion of teachers by academic qualification background

Year	General secondary	Vocational secondary	Higher education	Total
1993/1994	7	18	75	100
1994/1995	6	18	76	100
1995/1996	6	17	77	100
1996/1997	5	17	78	100
1997/1998	5	17	78	100
1998/1999	5	17	79	101
1999/2000	5	14	81	100

Graph 5. Proportion of teachers by academic qualification background



BEST COPY AVAILABLE

6 Public expenditure on general education as a percentage of GDP

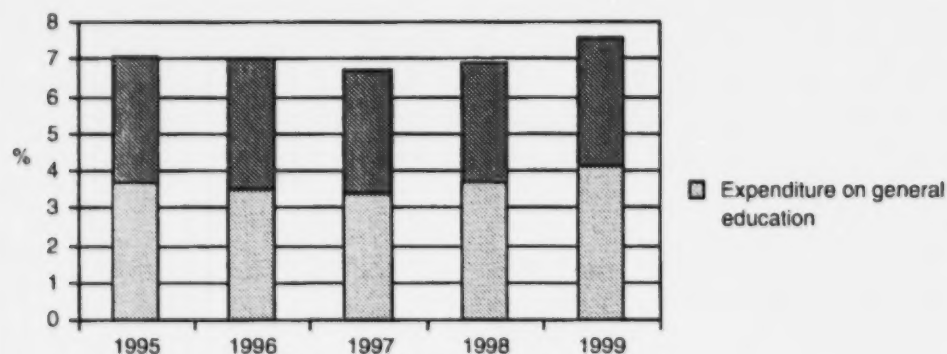
The amount of money spent on education varies from one education level to the other. Slightly more than half of public education

funds in 1999 were spent on general education which is 4 per cent of the GDP.

Table 6. Public expenditure on general education as a percentage of GDP

Year	Expenditure on general education	Total expenditure on education
1995	3.7	7.1
1996	3.5	7.0
1997	3.4	6.7
1998	3.7	6.9
1999	4.1	7.6

Graph 6. Public expenditure on general education as a percentage of GDP



7 Public expenditure on general education as a percentage of total public education budget

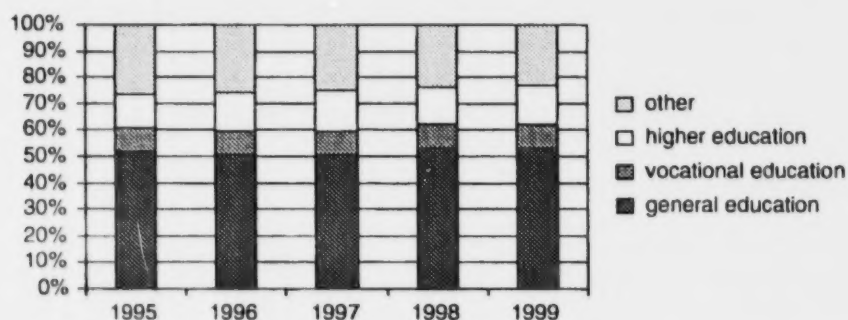
One important decision which each country must make concerns investments between the different levels of education. In Estonia the proportions between different education levels has been very steady during the 1995-

1999 period. During the 1995-1999 period, public expenditure on general education as a percentage of total public education budget varied from 50.6% in 1996 to 53.5% in 1999.

Table 7. Public expenditure on general education as a percentage of total public education budget

Level	1995	1996	1997	1998	1999
General education	51.9%	50.6%	50.8%	53.1%	53.5%
Vocational education	9.1%	9.0%	8.8%	8.8%	9.0%
Higher education	12.6%	14.5%	15.1%	14.2%	14.3%
Other	26.4%	25.8%	25.3%	23.8%	23.2%
Total	100%	100%	100%	100%	100%

Graph 7. Public expenditure on general education as a percentage of total public education budget



8 Ratio of annual statutory starting salaries of teachers to per capita GDP (PPP US\$)

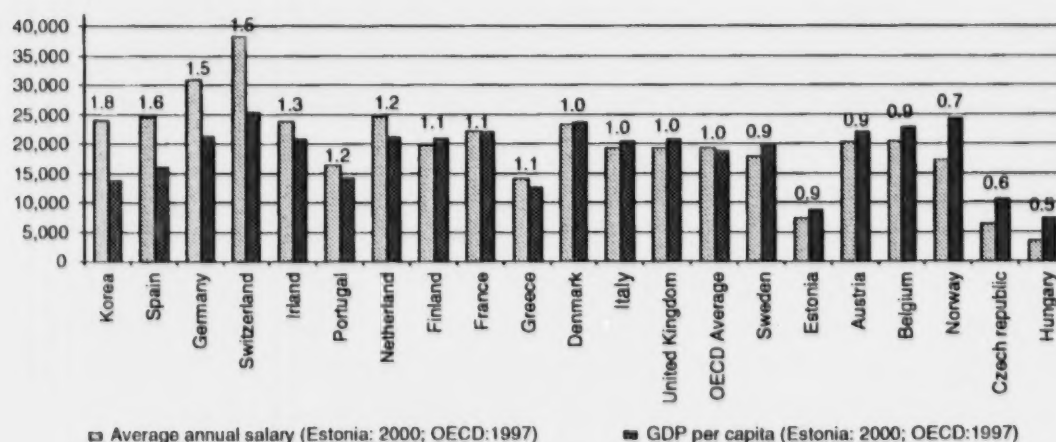
In thinking about a country's ability to attract people to the profession, it is relevant to compare teacher's salaries with the salaries of other professions in the country. For comparing teacher's salaries with the salaries of other professions, the GDP per capita is used as a substitute for the salaries of other profession in the country.

In Estonia the statutory starting salaries of teachers in primary and secondary schools is less than average GDP per capita. OECD average rate of salary to per capita GDP is 1.0. Under such circumstances it may be difficult to attract young personnel in the teaching profession.

Table 8. Ratio of annual statutory starting salaries of teachers to per capita GDP (PPP US\$)

	Ratio of salary to per capita GDP		Ratio of salary to per capita GDP
Korea	1.8	Spain	1.6
Germany	1.5	Switzerland	1.5
Ireland	1.3	Portugal	1.2
Netherlands	1.2	Finland	1.1
France	1.1	Greece	1.1
Denmark	1.0	Italy	1.0
United Kingdom	1.0	OECD average	1.0
Sweden	0.9	Estonia	0.9
Austria	0.9	Belgium	0.9
Norway	0.7	Czech Republic	0.6
Hungary	0.5		

Graph 8. Ratio of annual statutory starting salaries of teachers to per capita GDP (PPP US\$)



A few indicators
on Primary education

GAMBIA

Document prepared by:

Ceesay BAKARY
Ismalia DANSO

Ministry of Education

Introduction

The data of this document is actually obtained from the 1998-1999 education statistics. The education statistics for the current year (2000-2001) is not yet released from the Planning Directorate for public consumption.

The report is based only on a few of the education policy objectives. These are (1) to increase the access to basic education; (2) to increase the relevance and quality of education; (3) to reduce overcrowding in the schools; and (4) to increase female enrolment in schools.

In view of these objectives, the report is going to be elaborated on the following indicators:

- Percentage of female enrolment;
- Percentage of qualified teachers;
- Pupil/class ratio;
- Pupil/teacher ratio.

1 Percentage of female enrolment

The reduction of gender disparities in access to basic education through increased female enrolment is one of the policy objectives of education of the country. One of the indicators used in measuring female enrolment is the % of female enrolment.

The female participation (*Table 1*) decreases when going through the levels, from primary (46%) to senior secondary (36%). Though irregular values during the last seven years, the general trend of the evolution is to the increase of the female participation at all levels, the biggest raise

being in the senior secondary with an increase from 29 to 36% between 1992-1993 and 1998-1999.

Even though at national level, female enrolment constitutes a significant percentage of the total enrolment, *Table 2* and *Graph 2* below show the disparities by region. The percentage of female enrolment is balanced only in region 1 in 1998-1999. Regions 3 and 6 belong to the less balanced regions with respectively 42 and 43% of females.

Table 1. Percentage of female enrolment by level, from 1992 to 1998

Year	Primary	Junior secondary	Senior secondary
1992/1993	41	38	29
1993/1994	41	37	29
1994/1995	42	38	31
1995/1996	43	40	36
1996/1997	44	40	33
1997/1998	45	39	33
1998/1999	46	41	36

Graph 1. Percentage of female enrolment by level, 1992-1993 to 1998-1999

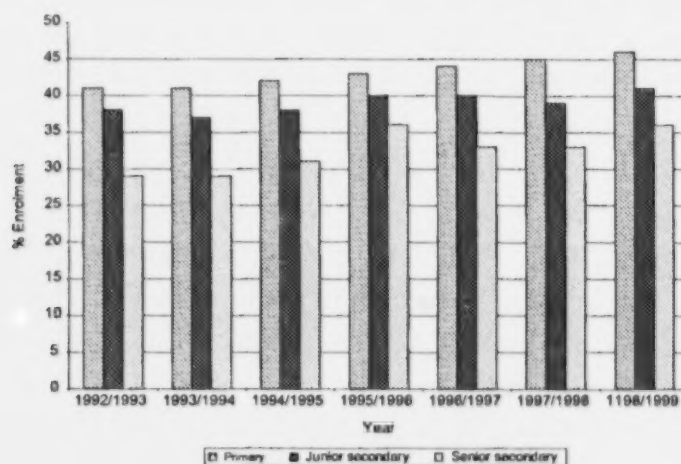
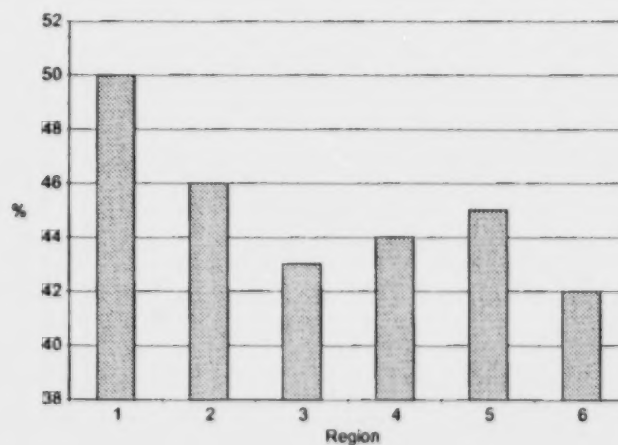


Table 2. Percentage of female enrolment by region 1998-1999

Region	Total enrolment	Female enrolment	Percentage of female enrolment
1	38,220	18,945	50
2	45,075	20,903	46
3	20,645	8,788	43
4	10,871	4,758	44
5	19,439	8,821	45
6	16,070	6,781	42

Graph 2. Percentage of female enrolment by region 1998-1999



2 Percentage of Qualified Teachers

One of the indicators used to measure the policy objective of increasing the relevance and quality of education, is the supply of % of trained/qualified teachers to all levels of education in the country (*Table 3 and Graph 3*). While going up through the levels, the percentage of qualified teachers in 1998-1999 increases respectively with 72, 81 and 99% of qualified teachers.

Despite some irregularities during the last 7 years, the primary level shows a trend to increase the supply of qualified/trained teachers. No trend appears in the evolution for the junior secondary, which presented a

minimum of 63 to a maximum of 81% during the period. The senior secondary level went more or less around 90% during the previous years, except two bad years in 1996-1997 and 1997-1998.

Qualified teachers are concentrated in regions 1 for all levels (*Table 4*), and in region 2 for primary and senior secondary, whilst region 6 has the lowest concentration of qualified teachers for primary and junior secondary levels and the second lowest for senior secondary. Region 6 is the most disadvantaged, but region 4 presents also a very low percentage for the senior secondary level.

Table 3. Percentage of qualified teachers by level, 1992-1993 to 1998-1999 (%)

Year	1992/1993	1993/1994	1994/1995	1995/1996	1996/1997	1997/1998	1998/1999
Primary	55	62	63	58	57	67	72
Junior secondary	65	74	69	74	63	66	81
Senior secondary	93	95	88	94	72	72	99

Graph 3. Percentage of qualified teachers by level

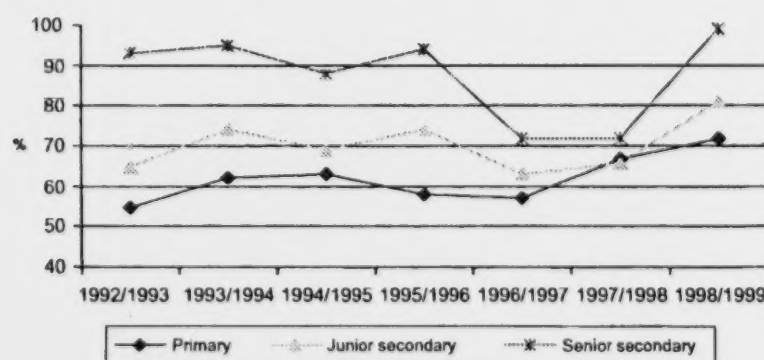
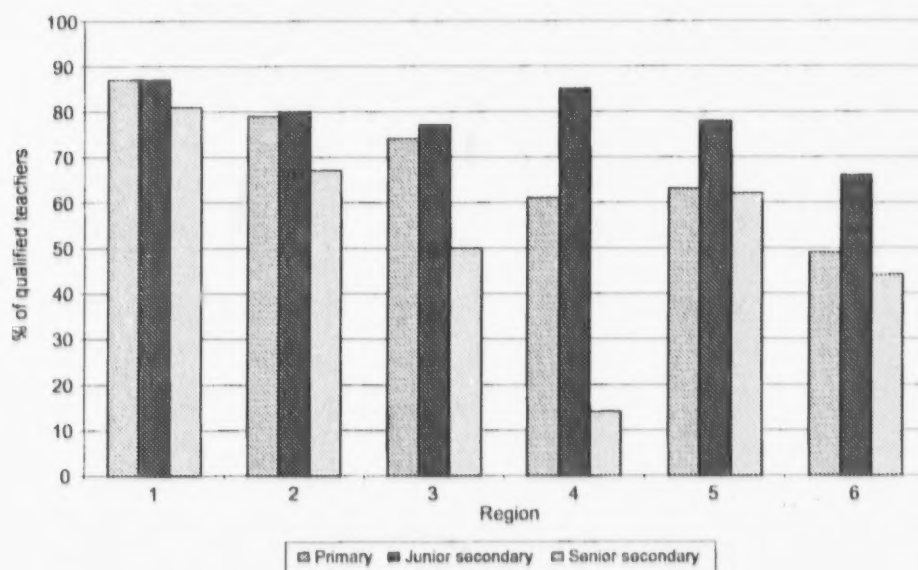


Table 4. Percentage qualified teachers by region and level 1998-1999

Region	Primary	Junior secondary	Senior secondary
1	87	87	81
2	79	80	67
3	74	77	50
4	61	85	14
5	63	78	62
6	49	66	44

Graph 4. Percentage of qualified teachers by region and level, 1998-1999



3 Pupil/class ratio, Pupil/teacher ratio

The reduction of overcrowding, inherent in the policy objectives, implies to measure the pupil-class ratio and the pupil-teacher ratio. The situation is respectively for the primary and secondary levels of 41, 54 and 45 pupils per class. The evolution since 1992 does not show a clear trend for this indicator. The recent 3 last years show however a decrease in primary and an increase in secondary compared to the previous years.

Though the policy objective strives to reduce these apparently high ratios, they fall within internationally acceptable standard and above all do not show any serious deteriorating condition.

There is an enormous regional disparity in pupils to class ratio (PCR). The highest PCR ratios are in regions 1 and 2 for all levels whilst region 3 has the lowest PCR for all levels except for primary. The maximum is 59 pupils by class.

Table 5. Pupil/class ratio by level, from 1992 to 1998

Year	Primary	Junior secondary	Senior secondary
1992/1993	38	45	45
1993/1994	40	43	44
1994/1995	41	39	43
1995/1996	40	46	43
1996/1997	45	45	45
1997/1998	43	49	46
1998/1999	41	54	45

Graph 5. Pupil/class ratio by level, 1992-1993 to 1998-1999

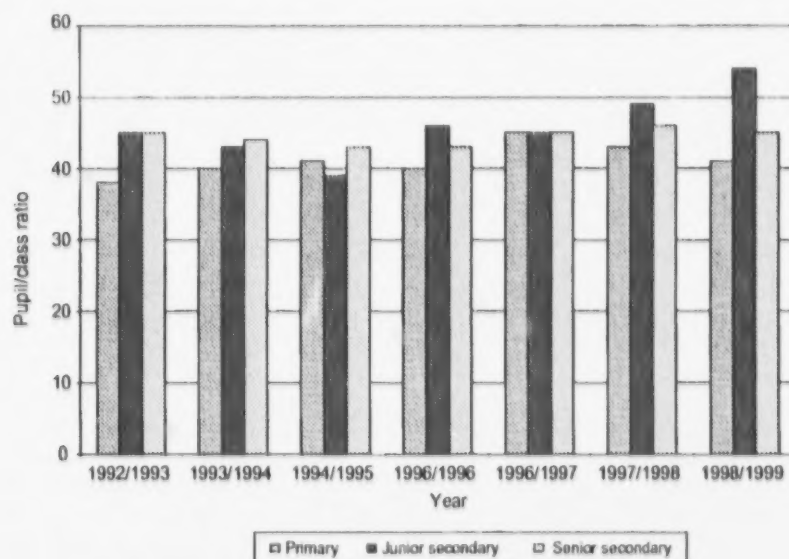


Table 6. Pupil/class ratio by region and level 1998-1999

Region	Primary	Junior secondary	Senior secondary
1	50	58	59
2	44	59	55
3	37	42	26
4	32	44	50
5	35	45	43
6	34	43	40

The pupil/teacher ratio (*Table 7*) is respectively for the primary and secondary levels of 33, 26 and 20. Up to 1993-1994 the ratio of primary was around 40 pupils per teacher. Then, it decreased rapidly. The ratio for junior and secondary levels did not almost change over the period.

Table 8 shows the disparities in the PTR. In primary level, Region 1 has the highest, with 38 pupils per teacher, and Region 4 has the lowest with 27. At junior secondary level, the highest PTR is in region 2 with 27 and the lowest in region 6 with 18. Region 3 has the highest PTR for the senior secondary level whilst region 2 has the lowest with 16 pupils per teacher.

Table 7. Pupil/teacher ratio by level, from 1992 to 1998

Year	Primary	Junior secondary	Senior secondary
1992/1993	42	26	22
1993/1994	38	27	20
1994/1995	34	29	21
1995/1996	30	21	20
1996/1997	30	27	20
1997/1998	33	27	19
1998/1999	33	26	20

Graph 6. Pupil/teacher ratio, 1992-1993 to 1998-1999

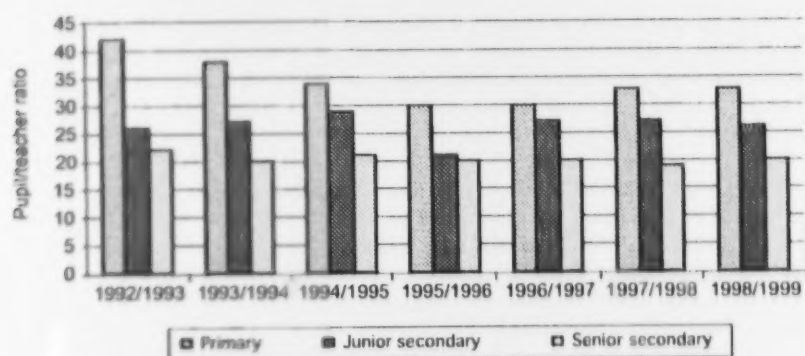


Table 8. Pupil/teacher ratio by level and region, 1998-1999

Region	Primary	Junior secondary	Senior secondary
1	38	25	22
2	34	27	16
3	32	25	27
4	27	23	23
5	32	26	21
6	28	18	17

A few indicators
on education

LITHUANIA

Document prepared by:

Ricardas ALISAUSKAS
Rita DUKYNAITE
Pranas GUDYNAS
Lina MARSAUSKAITE

Ministry of Education and Sciences

I. BUILDING INFORMATION SOCIETY

Introduction

The introduction of ICT into Lithuanian education began about 15 years ago. In 1986, informatics became a compulsory subject in all secondary schools, and since then, the government has sought to provide different types of computers to schools. Nowadays the ICT implementation into education is one of the most important and ambitious goals of Lithuanian government.

1 Student to computer ratio

The student to computer ratio in Lithuanian comprehensive schools was 58 at the end of 2000. The government seeks to reduce the ratio to 10 in the next 4 years. There are considerable differences between the different types of schools with regard to the access to ICT in schools (*Table 1*). The most favourable situation is in Lower and Upper Secondary schools.

Considerable differences between the different regions regarding the student to computer ratio exists too, from less than 30 in Pakruojis region to more than 100 in Panevėžys town, Siauliai and Kalvarija regions. The current situation is far from the goal even in the most advanced regions.

Table 1. Student to computer ratio in 2000 in Lithuanian comprehensive schools

School type	Percentage of students per school type	Ratio
Primary Schools – Kinder gardens	2.1%	459
Primary Schools	6.7%	335
Lower Secondary Schools	10.6%	40
Upper Secondary Schools	80.4%	57
Youth Schools	0.2%	14
Total	100%	58

Computerization of upper secondary schools

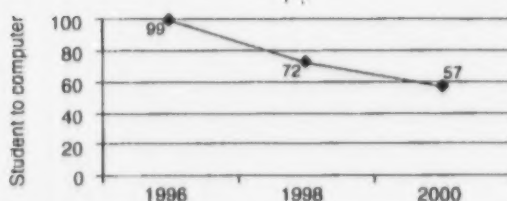
The provision of upper secondary schools with ICT has been the priority of Lithuanian government for many years. Student to computer ratio generally has improved over the last four years in upper secondary schools (*Graph 1.a.*), but the decrease of the ratio was fairly slow. The student to computer ratio in upper

secondary schools has only fallen from 99 in 1996 to 57 in 2000.

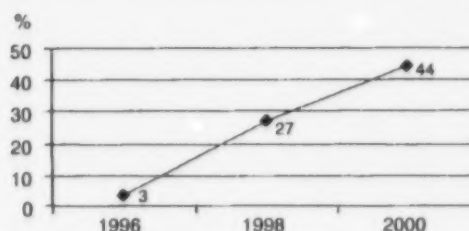
There are notable positive changes in the quality of computers. The percentage of Pentium machines increased from 3% to 44% during the year 1996–2000, but the most of equipment is still consisted of old-fashioned machines (*Graph 1.b.*)

Graph 1. Dynamic of ICT implementation over the 1996–2000 years in Lithuanian upper secondary schools

a. Student to computer ratio in upper secondary schools



b. Percentage of Pentium computers



2 The access to Internet services

The access to Internet services in Lithuanian comprehensive schools is far from sufficient. Table 2 shows most important indicators on opportunities to use Internet at all comprehensive schools.

Only 33% of them have access to Internet and only 3% of schools have high quality (i.e., leased line or radio link) access to the global network.

Table 2. Opportunities to access Internet at Lithuanian comprehensive schools in 2000

Indicator	%
Percentage of comprehensive schools with access to Internet services:	33%
✓ e-mail	31%
✓ WWW	24%
Percentage of schools with permanent access to Internet (i.e., leased line or radio link)	3%
Percentage of school computers connected to Internet	20%

ICT in schools' libraries

To develop students' information skills is one of the most important goals of educational reform in the country. The reorganisation of school libraries to modern information centres is the essential task in implementing this change in the curricula.

However only 12% of comprehensive schools have introduced computers in their libraries and only 2% of all machines nowadays are installed in the libraries (Table 3).

Table 3. ICT in comprehensive schools' libraries in 2000

Indicator	%
Percentage of comprehensive school libraries equipped with computers	12%
Average number of computers per equipped library	1.5
Percentage of computers in school libraries (out of the total number of computers at schools)	2%

II. REPETITION, DROP-OUT AND SURVIVAL RATES

While the drop-out rates (*Graph. 2*) for grades 3 to 5 are low (around 0.5%), the drop out rates in Grade 1 and Grades 6 to 9 show values (from 0.7 to almost 4%) that need to be reduced rapidly.

Because of the significant migration of population from rural areas to large towns, it is difficult to evaluate drop out rates in separate municipalities (*Table 7*).

One of important causes of the large number of dropouts is high repetition rate in some grades (*Graph 2*). Statistical measures confirm this. Average repetition rate is large in lower secondary school grades than it is in primary school grades (*Graph 3*).

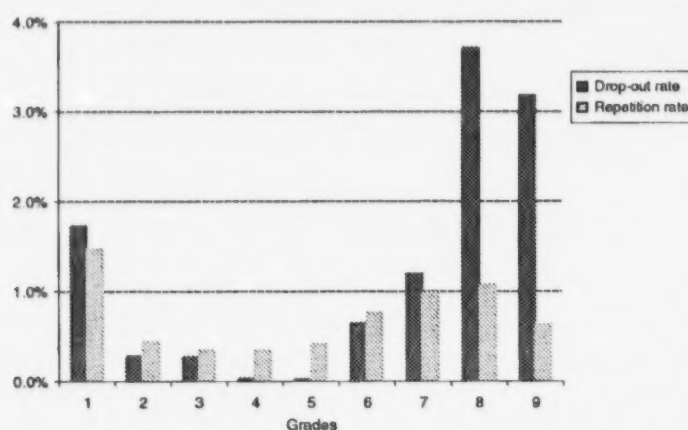
Though average repetition rate is reducing

every year, it is still large, more than 0,6% (*Graph 3*).

Another significant cause of the large number of dropouts could be that there are not enough good opportunities for development in 3 to 7 age period (*see page X*).

With respect to our objectives, it is of interest to increase the graduation rate from lower secondary school. In 1999-2000 this graduation rate remains low, at 77% level (*Table 6*). The survival rates in primary school and in grades 1-8 aren't high too. In 1999-2000 they were 97% (*Table 4*) and 92% (*Table 5*) respectively. One of the causes of such a situation is the comparatively high number of dropouts.

Graph. 2. Distribution of drop-out rate and repetition rate by grade, 2000-2001



Graph 3. Average repetition rates by year

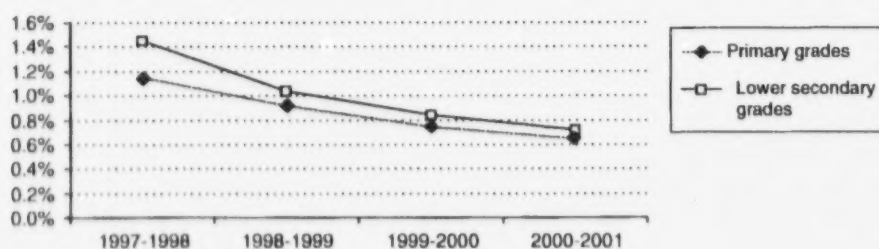


Table 4. Survival rate, primary, 1999-2000

Survival rate, Grades 1-4	Number of pupils enrolled in Grade 1 in school year 1996-1997	Number of pupils enrolled in Grade 5 in school year 2000-2001
0.97	54,410	53,098

Table 5. Survival rate, Grades 1-8, 1999-2000

At 8 grade level	Number of pupils enrolled in Grade 1 in school year 1992/1993	Number of pupils that finished Grade 8 in school year 1999/2000
0.92	56,643	51,814

Table 6. Lower secondary school graduation rate, 1999-2000

Graduation rate, Grades 10	Number of pupils enrolled in Grade 1 in school year 1990/1991	Number of pupils that obtained lower secondary education in school year 1999/2000
0.77	53,504	41,365

Table 7. Increase or decrease of the number of pupils in Grade 5 in school year 2000/2001 compared to number of pupils in Grade 1 in school year 1996/1997

Municipality	%	Municipality	%	Municipality	%
Neringos m.	7.4	Silales raj.	-2.3	Vilkaviskio raj.	-5.6
Svencioniu raj.	6.6	Panevezio m.	-3.4	Alytaus raj.	-6.0
Birstono m.	5.7	Siauli_ m.	-3.4	Lazdiju raj.	-6.0
Marijampoles m.	5.0	Sakiu raj.	-3.5	Telsiu raj.	-6.1
Klaipedos m.	4.9	Kaisiadoriu raj.	-3.6	Kedainiu raj.	-6.2
Vilniaus m.	3.3	Palangos m.	-3.6	Marijampoles raj.	-6.3
Skuodo raj.	2.6	Visagino m.	-3.6	Kupiskio raj.	-6.4
Kauno m.	2.5	Utenos raj.	-3.7	Akmenes raj.	-7.0
Kretingos raj.	2.0	Pakruojo raj.	-3.9	Panevezio raj.	-7.2
Varenos raj.	1.0	Rokiskio raj.	-4.0	Salcininku raj.	-7.6
Druskininku m.	0.9	Jurbarko raj.	-4.1	Klaipedos raj.	-7.8
Zarasu raj.	0.3	Raseiniu raj.	-4.2	Siauliu raj.	-8.1
Prienu raj.	-0.5	Silutes raj.	-4.5	Ignalinos raj.	-8.3
Ukmerges raj.	-0.5	Traku raj.	-4.7	Vilniaus raj.	-9.0
Moletu raj.	-0.8	Mazeikiu raj.	-4.8	Joniskio raj.	-10.9
Sirvintu raj.	-1.1	Taurages raj.	-4.8	Jonavos raj.	-11.1
Anyksciu raj.	-1.4	Radviliskio raj.	-5.0	Pasvalio raj.	-11.9
Plunges raj.	-1.8	Birzu raj.	-5.1	Kauno raj.	-13.3
Alytaus m.	-2.3	Kelmes raj.	-5.1		

A few indicators
on education

THAILAND

Document prepared by:

Bunyarat. KAMONRAT
Jumpot KHUMWEERA
Chantarat KOTKAM
Petchara PIPATSUNTIKUL
Chalo WONGSAWANG
San. WORAINTHARA

Ministry of Education

1 The gross enrolment ratio

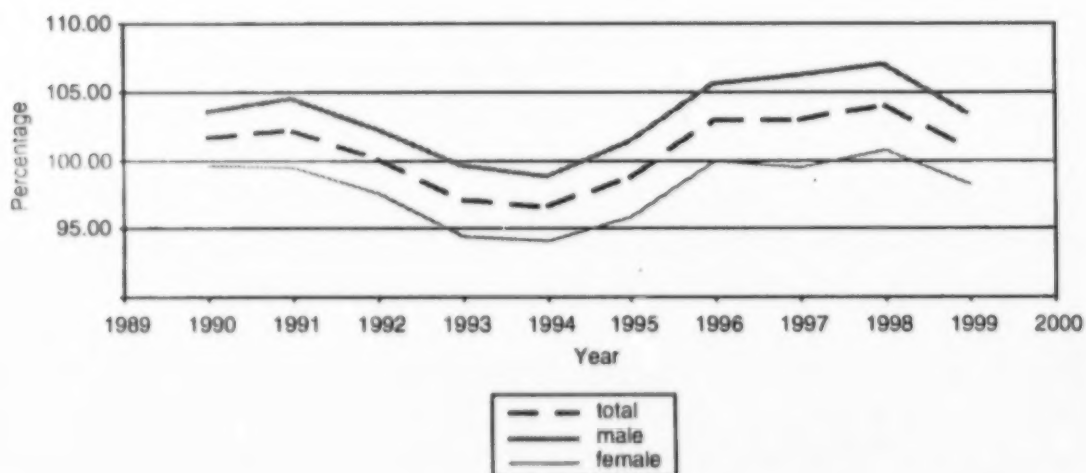
The gross enrolment ratio in Thailand is nearly 100%. Sometimes the ratio is over 100%. The net enrolment ration (students of official school-age/population of the same school age) would allow us to verify

whether the enrolment corresponds to the students of official age, or reveals over aged or underaged students. Gross enrolment rates between male and female are the same.

Table 1. Enrolment rate in primary education in Thailand, 1990-1999

Year	Enrolment			Age group			Enrolment Rate		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1999	596,843	555,866	1,152,709	577,071	558,248	1,135,319	103.4	99.6	101.5
1991	594,429	548,945	1,143,374	569,733	551,868	1,121,601	104.3	99.5	101.9
1992	575,124	533,895	1,109,019	563,465	546,888	1,110,353	102.1	97.6	99.9
1993	554,930	512,461	1,067,391	557,959	542,394	1,100,353	99.5	94.5	97.0
1994	545,343	505,468	1,050,811	552,592	537,336	1,089,928	98.7	94.1	96.4
1995	553,695	511,144	1,064,839	547,238	533,402	1,080,640	101.2	95.8	98.5
1996	572,684	529,741	1,102,425	543,512	530,144	1,073,656	105.4	99.9	102.7
1997	575,476	527,028	1,102,504	542,934	530,001	1,072,935	106.0	99.4	102.8
1998	578,041	531,771	1,109,812	540,856	528,424	1,069,280	106.9	100.6	103.8
1999	558,288	518,554	1,076,842	540,711	528,122	1,068,833	103.3	98.2	100.7

Graph 1. Enrolment rate in primary education in thailand (1990-1999)



2 Expenditure on education

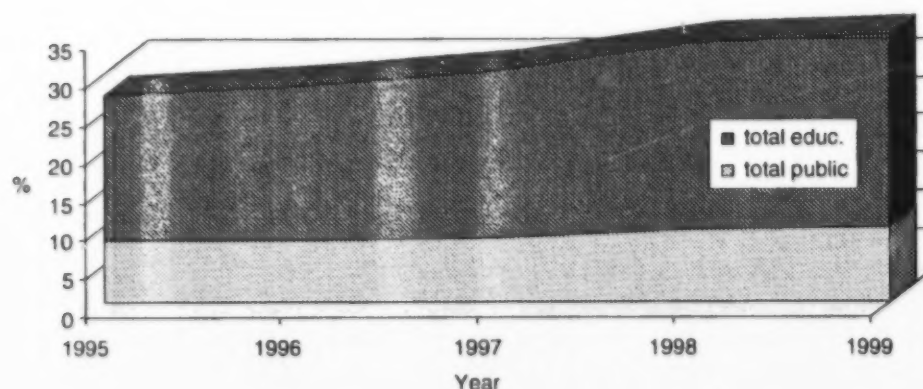
For improving the quality of compulsory education, we spent in primary education from 43.4% in 1995 to 39.1% in 1999 of the total educational budget, a light decrease. When compared with the total

public expenditure, the money spent on education, for primary and all levels, was increasing respectively from 8.21% and 18.90% in 1995 to 9.9% and 25.3% in 1999.

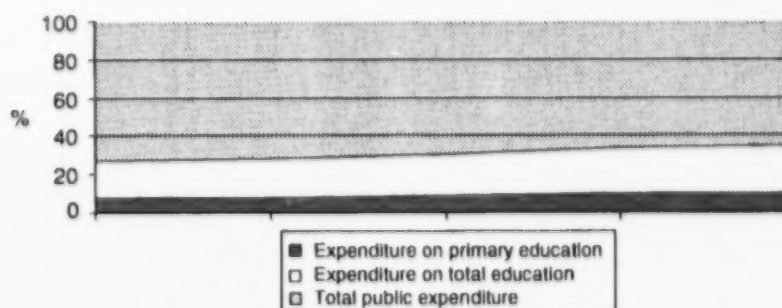
Table 2. Share of education in the public current expenditure

Year	Share of primary education in total education expenditure	Share of primary education in total public expenditure	Share of total education in the total public expenditure
1995	43.4	8.2	18.9
1996	41.5	8.3	20.1
1997	38.8	8.5	21.9
1998	40.2	9.7	24.3
1999	39.1	9.8	25.2

Graph 2. Share of education in the public current expenditure



Graph 3. Percentage of public current expenditure on primary education as share of total public current expenditure on education and total expenditure



3 Students per teacher ratio

To improve the quality of education, the number of students per teacher shows good quality of teaching. In Thailand, teacher and students rates is about 1:21 to 1:22. This

number shows that the quality of teaching is good. The government has improved the state of facilities and the materials are available, but it could reduce this ratio to a smaller number.

Table 3. Students per teacher ratio, 1990-1999

Year	Students	Teachers	Students per teacher
1990	6,676,562	300,413	22
1991	6,703,054	302,766	22
1992	6,643,891	304,782	22
1993	6,724,733	353,354	19
1994	6,569,856	320,124	21
1995	6,483,938	318,137	20
1996	6,549,797	316,566	21
1997	6,858,950	316,013	22
1998	6,580,149	316,645	21
1999	6,728,961	314,914	21

Graph 4. Students per teacher, 1990-1999

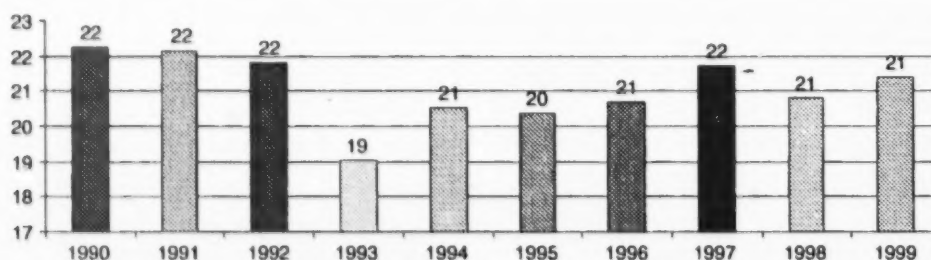


Table 4. Students per teacher, in primary school by region, 1999

Region	Students	Teachers	Students per teacher
1	320,743	13,156	24
2	299,795	11,854	25
3	544,041	25,974	21
4	195,763	9,234	21
5	380,407	19,271	20
6	340,876	18,456	18
7	629,533	33,201	19
8	628,577	32,474	19
9	838,884	38,253	22
10	955,143	44,408	22
11	1,095,870	46,879	23
12	452,888	19,825	23
BKK	46,441	1,929	24
Total	6,728,961	314,914	21

4 Repetition rate

The repetition rate in Thailand was 3% in 1998-1999. It does not show a clear trend of evolution. To reduce the repetition rate

the government must enhance pedagogical support of teachers. They need more training courses.

Table 5. Repetition rate, 1990-1998

Year	N° of student	Reapeaters	Repetition Rate %
1990	5,973,884	174,535	3.0
1991	5,738,699	214,079	3.7
1992	5,581,763	158,478	2.8
1993	5,383,055	146,833	2.7
1994	5,095,253	156,005	3.1
1995	4,742,814	146,937	3.1
1996	4,662,350	148,386	3.2
1997	4,638,613	139,436	3.0
1998	4,632,337	139,436	3.0

Graph 5. Repetition rate

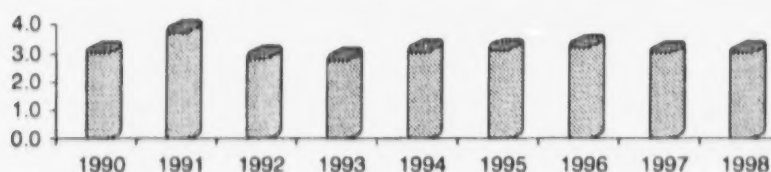
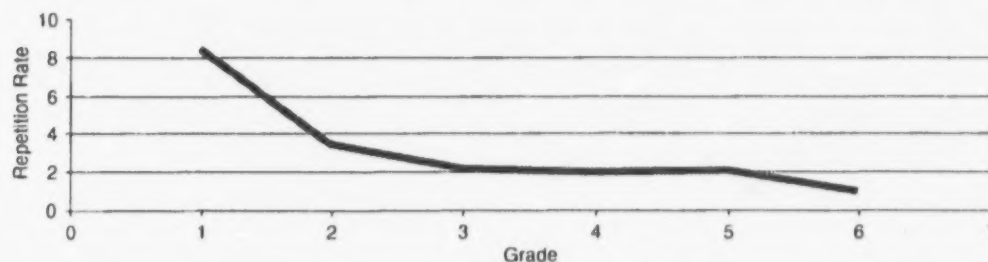


Table 6. Repetition rate of primary education, 1998

Grades	Student	Reapeaters	Repetition Rate %
1	827,469	68,865	8.3
2	765,443	25,878	3.4
3	746,576	15,980	2.1
4	761,679	14,568	1.9
5	789,621	15,663	2.0
6	771,562	7,432	1.0

Graph 7. Repetition rate of primary education, 1998



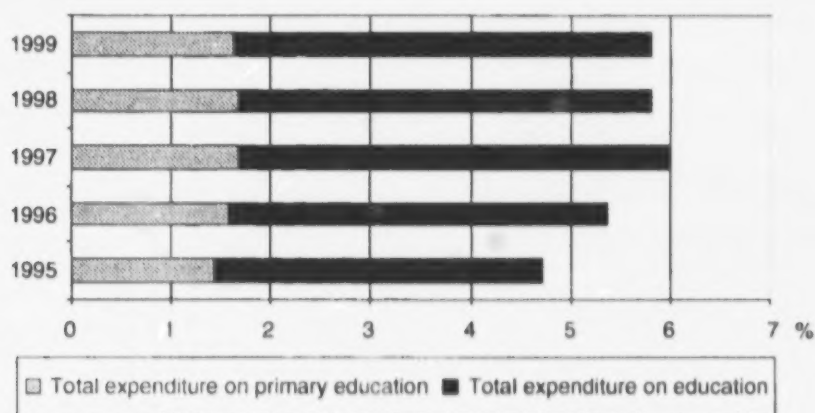
5 Share of educational expenditure in the GNP

The percentages of education expenditure share to GNP in Thailand were very low. From 1995-1999, it was only 1.59% by average for primary education and only 3.94% by average for all levels of education.

Table 7. Percentage of the educational expenditure in relation to the GNP

Year	Total expenditure on primary education	Total expenditure on education
1995	1.43	3.29
1996	1.57	3.79
1997	1.68	4.33
1998	1.67	4.14
1999	1.63	4.17

Graph 6. Share of the educational expenditure in the GNP



Annex

Framework of Indicators on Compulsory Education

General objectives

1. To increase the access rate to compulsory education
2. To improve the quality of compulsory education

Objective 1: To increase the access rate to compulsory education

- | | | |
|-----|---------------------|--|
| 1.1 | Indicator 1: | Gross enrolment ratio (GER) |
| | <i>Objective:</i> | To measure the enrolment rate of students |
| | <i>Rationale:</i> | To increase the number of students in primary education |
| | <i>Level:</i> | National |
| | <i>Breakdown:</i> | By gender |
| | <i>Formula:</i> | Number of students enrolled in schools/number of students of the official school age group |
| | | |
| 1.2 | Indicator 2: | Survival rate |
| | <i>Objective:</i> | To evaluate the education efficiency |
| | <i>Rationale:</i> | To extend compulsory education from 6 years to 9 years |
| | <i>Level:</i> | National and regional |
| | <i>Breakdown:</i> | By gender |
| | <i>Formula:</i> | Number of students that achieve grade 9/number of students enrolled in Grade 1 |
| | | |
| 1.3 | Indicator 3: | Proportion of special education teachers in the teaching staff |
| | <i>Objective:</i> | To evaluate the weight of special education teachers in the teaching staff |
| | <i>Rationale:</i> | To improve the enrolment rate of special education students. |
| | <i>Level:</i> | Region and local |
| | <i>Breakdown:</i> | By region |
| | <i>Formula:</i> | Number of special education teachers/number of total teaching staff |
| | | |
| 1.4 | Indicator 4: | Proportion of expenditure on special education in the total purchase |
| | <i>Objective:</i> | To measure the support of education policy on special education |
| | <i>Level:</i> | National and regional |
| | <i>Breakdown:</i> | By region |
| | <i>Formula:</i> | Expenditure on special education/total expenditure on education |

Objective 2: To improve the quality of compulsory education

- 2.1 Indicator 5:** Expenditure on education.
Objective: To measure the importance of policy
Rationale: To improve the financial support yield from the policies
Level: National
Breakdown: By year
Formula: Education expenditure/total expenditure
- 2.2 Indicator 6:** Number of students per teacher
Objective: To measure the quality of education
Rationale: To improve the conditions of teaching-learning process
Level: National and regional
Breakdown: By region
Formula: Number of students/number of teachers
- 2.3 Indicator 7:** Number of students per class
Objective: To measure the quality of education
Rationale: To improve the state of facilities and the conditions of teaching-learning process
Level: National and regional
Breakdown: By region
Formula: Number of students/number of class
- 2.4 Indicator 8:** Cost per head
Objective: To measure the cost of education
Rationale: To enhance pedagogical support of teachers
Level: National number of students per class
Breakdown: National number of student per class
Formula: Total education expenditure/number of students
- 2.5 Indicator 9:** Repetition rate
Objective: To measure the efficiency of educational system
Rationale: To enhance pedagogical support of teachers
Level: National and regional
Breakdown: National and enrolment rate
Formula: Number of failed students/total students

- 2.6 Indicator 10:** Percentage of qualified teachers
- Objective:* To measure the quality of education
- Rationale:* To improve the qualification of teachers
- Level:* National level and regional
- Breakdown:* National and regional
- Formula:* Number of qualified teachers/total number of teachers
-
- 2.7 Indicator 11:** Percentage of educational expenditure in relation to the GNP
- Objective:* To measure the efficiency of management system
- Rationale:* To improve efficiency of the management of resources
- Level:* National
- Breakdown:* By year
- Formula:* Educational expenditure/GDP

IIEP publications and documents

More than 1,200 titles on all aspects of educational planning have been published by the International Institute for Educational Planning. A comprehensive catalogue is available in the following subject categories:

Educational planning and global issues

General studies – global/developmental issues

Administration and management of education

Decentralization – participation – distance education – school mapping – teachers

Economics of education

Costs and financing – employment – international co-operation

Quality of education

Evaluation – innovation – supervision

Different levels of formal education

Primary to higher education

Alternative strategies for education

Lifelong education – non-formal education – disadvantaged groups – gender education

Copies of the Catalogue may be obtained on request from:

IIEP, Dissemination of Publications
information@iiep.unesco.org

Titles of new publications and abstracts may be consulted at the following website:
<http://www.unesco.org/iiep>.

The International Institute for Educational Planning

The International Institute for Educational Planning (IIEP) is an international centre for advanced training and research in the field of educational planning. It was established by UNESCO in 1963 and is financed by UNESCO and by voluntary contributions from Member States. In recent years the following Member States have provided voluntary contributions to the Institute: Denmark, Finland, Germany, Iceland, India, Ireland, Norway, Sweden and Switzerland.

The Institute's aim is to contribute to the development of education throughout the world, by expanding both knowledge and the supply of competent professionals in the field of educational planning. In this endeavour the Institute co-operates with interested training and research organizations in Member States. The Governing Board of the IIEP, which approves the Institute's programme and budget, consists of a maximum of eight elected members and four members designated by the United Nations Organization and certain of its specialized agencies and institutes.

Chairperson:

Dato' Asiah bt. Abu Samah (Malaysia)

Director, Lang Education, Kuala Lumpur, Malaysia.

Designated Members:

Torkel Alfthan

Head, Training Policy and Employability Unit, Skills Development Department, International Labour Office (ILO) Geneva, Switzerland.

Eduardo A. Doryan

Vice-President, Human Development Network (HDN), The World Bank, Washington D.C., USA.

Carlos Fortin

Assistant Secretary-General, United Nations Conference on Trade and Development (UNCTAD), Geneva, Switzerland.

Edgar Ortégón

Director, Projects and Investment Programming Division, Latin American and Caribbean Institute for Economic and Social Planning (ILPES), Santiago, Chile.

Elected Members:

José Joaquín Brunner (Chile)

Director Education Programme, Fundación Chile, Santiago, Chile.

Klaus Hüfner (Germany)

Professor, Freie Universität Berlin, Berlin, Germany.

Faiza Kefti (Tunisia)

Minister of Vocational Training and Employment, Tunis, Tunisia.

Teboho Moja (South Africa)

Professor of Higher Education, New York University, New York, USA.

Teiichi Sato (Japan)

Special Adviser to the Minister of Education, Science, Sports and Culture, Tokyo, Japan.

Tuomas Takala (Finland)

Professor, Department of Education, University of Tampere, Tampere, Finland.

Michel Vernières (France)

Professor, Laboratoire d'économie sociale, University of Paris I, Paris, France.

Inquiries about the Institute should be addressed to:

The Office of the Director, International Institute for Educational Planning,
7-9 rue Eugène-Delacroix, 75116 Paris, France.



**International Institute
for Educational Planning**

7-9 rue Eugène-Delacroix
75116 PARIS - FRANCE
Web site : www.unesco.org/iiep



*U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)*



NOTICE

Reproduction Basis

- ☒ This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.
- ☐ This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").